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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,620	03/29/2004	Nevio Benvenuto	3286-0198PUS1	9084
2292	7590	06/05/2007		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER BOCURE, TESFALDET	
			ART UNIT 2611	PAPER NUMBER
			NOTIFICATION DATE 06/05/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

sf

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/810,620		BENVENUTO ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tesfaldet Bocure		2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 and 13-15 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-7, 11, 12 and 16-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/14/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The Examiner has considered the Information Disclosure Statement received on June 14, 2004 and the initialed copy of the IDS is attached with this correspondence.

### ***Specification***

3. The abstract of the disclosure is objected to because the title of the invention in the abstract of the disclosure should be deleted.
4. "Fig. 2" in line 13 of the abstract of the disclosure should be deleted. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

5. Claims 1-7, 17/1, and 18/1 are objected to because of the following informalities:  
The claimed "step d" in line 13 should be changed to read as—step f)---. It is in step f) where the changing of the mode took place not in step d).  
Claims 11, 12/11, 16, 17/7 and 18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the

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alternative only and cannot depend from other multiple dependent claim. Claims 2-7, 17/1 and 18/1 are inherently objected as being dependent on the objected base claim.

See MPEP § 608.01(n). Accordingly, the claims 11, 12/11, 16, 17/7 have not been further treated on the merits.

Appropriate correction is required.

### ***Allowable Subject Matter***

6. The following is a statement of reasons for the indication of allowable subject matter: the claimed subject matter in claims 1-18 is allowable because the arts of record fail to teach or fairly suggest the claimed "A method of allocating transmission parameters to individual carriers of a multicarrier communication system for each coded and modulated symbol to be transmitted, the method determining an optimum overall value of a first of said transmission parameters while meeting predetermined constraints for an overall value of a second parameter, the carriers being adaptively modulated, characterized in that, for a system providing also for an adaptive coding, the method comprises in combinations with the claimed the steps of: determining plurality of transmission modes; determining transition costs; allotting a respective first transmission mode; evaluating the second parameter; if the second parameter meets the constraints, using the respective first transmission; if the second parameter does not meet the constrain, change he mode allotted; evaluating the over all second parameter and iterating thereafter the modes changed as in claims 1, 8 and 13,

**Conclusion**

7. This application is in condition for allowance except for the following formal matters:

The objection to the claims indicated above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent publication number 2004/0100911 and US patent number 7,206,332 to Kwan et al. disclose link adoption method for adapting the power of the signal be transmitted according to modulation and coding.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti (Jay) Patel can be reached on (571) 272-2988. The fax phone

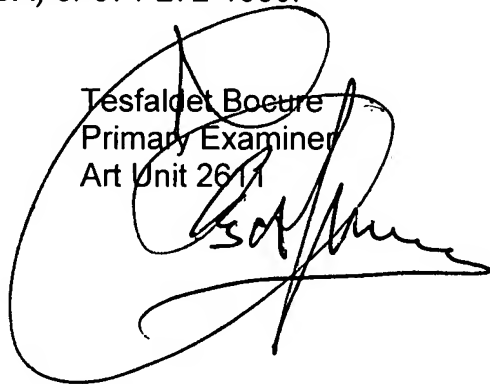
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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tesfaldet Bocure  
Primary Examiner  
Art Unit 2611

T.Bocure

A large, stylized handwritten signature in black ink, which appears to be 'Tesfaldet Bocure', is written over the printed name and title of the Primary Examiner.